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| | APPLICATION NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NO |
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| | 08/488,322 | 06/07/95 LOKH | OFF | G PHN13-2410 |
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| | PATENT DEPAR | TMENT | | 8 |
| | 580 WHITE PL TARRYTOWN NY | | | 2603 |
| | 111111111111111111111111111111111111111 | 19371 | | DATE MAILED: 01/27/97 |
| | This is a communication from COMMISSIONER OF PATEN | the examiner in charge of your a | pplication. | |
| | | OFFICE A | CTION SUMMARY | |
| X _{Re} | esponsive to communication | on(s) filed on | 6-7-95 | |
|] TI | his action is FINAL. | | | |
| A sho which | rtened statutory period for ever is longer, from the ma oplication to become aban | e under Ex parte Quayle, 193 response to this action is set alling date of this communica doned. (35 U.S.C. § 133). E | to expire 3 | month(s), or thirty days, thin the period for response will cause btained under the provisions of 37 CFR |
| Dispo | sition of Claims | | | |
| X | Claim(s) | 1-44 | | is/are pending in the application |
| | Of the above, claim(s) | 1-23 | | is/are pending in the applicatio |
| | Claim(s) | | | is/are allowed. |
| X | Claim(s) | 24-44 | | is/are rejected. |
| | Claim(s) | | , | is/are objected to. |
| | Claims | | are | subject to restriction or election requireme |
| \pp!l | cation Papers | | | |
| X | See the attached Notice of | of Draftsperson's Patent Draw | ring Review, PTO-948. | |
| | The drawing(s) filed on _ | | is/are obje | ected to by the Examiner. |
| | The proposed drawing co | rrection, filed on | | is 🗌 approved 🔲 disapprove |
| | The specification is object | led to by the Examiner. | | |
| | The oath or declaration is | objected to by the Examiner. | | |
| rior | ity under 35 U.S.C. § 11 | 9 | | |
| K A | cknowledgement is made | of a claim for foreign priority (| under 35 U.S.C. § 119(a)- | (d). |
| | All Some X Nor | ne of the CERTIFIED copie | s of the priority documents | have been |
| | received. | | | |
| ′_ | | No. (Series Code/Serial Num | ber) | |
| C | received in this nationa | I stage application from the Ir | nternational Burèau (PCT R | ule 17.2(a)). |
| | ertified copies not received | | | |
| | | of a claim for domestic priorit | y under 35 U.S.C. § 119(e |)). |
| | chment(s) | • | | |
| - 4 | Notice of Reference Cited | 1, PTO-892 | | |
| • | | atement(s), PTO-1449, Pape | r No(s) | |
| | Interview Summary, PTO | | | |
| | • | -413 Patent Drawing Review, PTO | D46 | |
| Α. | inclice of Draftsperson's I | -alent Drawing Heview, PTO | -940 | |

Notice of Informal Patent Application, PTO-152

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Part III DETAILED ACTION

1. Claims 24-33 and 35-43 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-33 of U.S. Patent No. 5,323,396 in view of Yoshikawa.

- U.S. Patent No. 5,323,396 claimed nearly all the subject matter now claimed. Note claim 26 at column 28 lines 38-68 recite the receiver for receiving encoded digital signal. Each digital signal comprises consecutive frames whereby each frame comprises a plurality of information packets and each packet having N bits, where N>1. Line 42 which recite the decoder for receiving the encoded signal and lines 47-68 which recite the decoder for decoding the encoded signal having average frame rate characterized by the formula
- $P = -\frac{BR}{N} x \frac{n}{F_s} -$

by selecting the numbers v and w whereby the average frame rate of the encoded digital signal is substantially equal to F_s/n_s clearly anticipate transforming or converting the encoded signal into a replica of the wideband digital signal characterized by the formula above. U.S. Patent No. 5,323,396 in Claim 29 which recite the number $n_s=384$, clearly anticipate $n_s=384$ as in claim 28. Claim 3 which recite the first frame portion including

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system information clearly anticipate the first frame including system information as in claim 30. Claim 23 which recite the synthesis-filter means responsive to the respective quantized subband signals to construct a replica of the first digital signal clearly anticipate the synthesis filter means for reconstructing a replica of the wide-band digital signal as in claim 36. Claim 10 which recite the scale factor information associated with the quantized subband signals in the third frame portion clearly anticipate the scale factor information in the third frame portion as in claim 37. Claim 7 which recite the third frame includes information related to scale factors SFs whereby a scale factor SF is associated with at least one of the quantized subband signals in the third frame and SF information included is before quantization clearly anticipate the retrieval means for retrieving SF information as in claims 38 and 41.

U.S. Patent No. 5,323,396 did not claim the decoder comprising means for converting and outputting the replica of the wideband digital signal as recited in claims 24 and 42.

Yoshikawa teaches that it is known to provide receiver comprising a decoder section including a feed forward adaptive inverse quantizer and a PCM format converter as set forth at column 2 lines 16-28 in the field of multiplex communication for the purpose of transmitting and receiving network communication using variable rate encoding which clearly anticipate the decoder



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comprising means for converting and outputting the replica of the wideband digital signal.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the decoder comprising means for converting and outputting the replica of the wideband digital signal as taught by Yoshikawa to the system of U.S. Patent No. 5,323,396 because Yoshikawa teaches the desirable advantage of decomposing information unit having a fixed length or a variable length entropy-coded signal with lighter deterioration of quality at the receiver and said lighter deterioration of quality being desirable in order to achieve efficient system operation in U.S. Patent No. 5,323,396.

- 2. Claim 34 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over U.S. Patent No. 5,323,396 in view of Yoshikawa as applied to claims 24 and 30 above, and further in view of Wharton.
- U.S. Patent No. 5,323,396 in view of Yoshikawa did not teach that the system information identifies a transmission mode, e.g. the encoded signal is related to a stereo audio signal, mono audio signal, a bilingual signal, or an intensity stereo encoded audio signal and the decoder for retrieving the mode identification.

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Wharton teaches that it is known to provide the AM detector output signal for identifying whether the signal is of matrixed (stereo) or un-matrixed (bilingual) form whereby if the signal is matrixed form, a stereo indicator LED is illuminated and an audio matrix is placed in a stereo decode mode of operation and likewise a bilingual indicator LED is illuminated and placed in a bilingual mode of operation if signal is of un-matrixed form as recited in col. 1 line 37 to col. 2 line 2 in the field of multiplex communication for the purpose of controlling the circuitry for processing audio signals in a stereophonic bilingual signal processor which clearly anticipate that the system information identifies a transmission mode, e.g. the encoded signal is related to a stereo audio signal, mono audio signal, a bilingual signal, or an intensity stereo encoded audio signal and the decoder for retrieving the mode identification.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the system information identifying a transmission mode and the decoder for retrieving the mode identification as recited in Wharton because Wharton teaches the desirable advantage of a controlling audio input signals of different format in order to achieve higher fidelity system operation in U.S. Patent No. 5,323,396 in view of Yoshikawa.

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The obviousness-type double patenting rejection is a judicially established doctrine based upon public policy and is primarily intended to prevent prolongation of the patent term by prohibiting claims in a second patent not patentably distinct from claims in a first patent. *In re Vogel*, 164 USPQ 619 (CCPA 1970). A timely filed terminal disclaimer in compliance with 37 C.F.R. § 1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. § 1.78(d).

Specification

- 3. The Abstract of the Disclosure is objected to because in line 7 insert a comma after "packets" for clarity. Line 8 which recite "whose corresponding information in the encoded digital signal" is not clear as to whether it is reciting the corresponding information being in one frame of the encoded digital signal or what. Correction is required. See M.P.E.P. § 608.01(b).
- 4. The disclosure is objected to because of the following informalities: in page 5 line 4 of the amendment received on 6-7-95, delete "quantised" and insert ---quantized---. In page 2 line 11 of the amendment, delete "the decoder and is adapted" and insert ---and is adapted--- for clarity. Appropriate correction is required.

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Claim Objections

5. Although applicants claims 24-44 have been rejected under 112/2d, the following language is understandable, i.e. the metes and bounds are determinable, however the grammar and systax could be improved. Examples are in claims 25-41 and 43-44 line 1 delete "A decoder" and "A receiver," respectively, and insert --- The decoder--- and ---The receiver---, respectively. In claim 44 line 2 delete typo "arrnged" and insert --- arranged---. In claim 29 lines 1-2 which recite "BR = 384" is not clear as to whether it is reciting ---BR = 384 bits per sec.--- or what. It is in the best interest of the patent community that applicant, in his/her normal review and/or rewriting of the claims, to take into consideration these editorial situations and make changes as necessary.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to provide an enabling disclosure.

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In page 9 lines 21-28 which recite the decoder for recovering the wide-band digital signal is not clear as to how the decoder converts or what means are used for converting the encoded digital signal into a replica of the wideband digital signal and outputting the replica. No means for converting and outputting in the decoder have been recited as in claims 24 and 42 and therefore no support for means for converting is found in the specification as claimed.

- 7. Claims 24-44 are rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the specification above.
- 8. Claims 24-44 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 24 and 42 lines 26-27 and 30-31, respectively, which recite "P' is the highest integer ... less than P" is not clear as to whether it is reciting ---P' is the next lower integer following P--- as in amended page 3 lines 19-20 or --P' is the next higher integer following P--- or what. In claim 43 line 2 which recite "means for converting" is not clear as to

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whether it is reciting ---a second means for converting--- or --- said means for converting---, as in claim 42 line 14, or what.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mathieu et al. disclose process and apparatus for digital data communication using packet switching having means for structuring the data into successive frames of predetermined length.

Matsushige discloses audio data communications device comprising a master and slave devices for processing digital audio data.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick Hom whose telephone number is (703) 305-4742.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4750.

SH January 8, 1997 DOUGLAS W. OLMS
IPERVISORY PATENT EXAMINER
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